SURGICAL INSTRUMENT INCORPORATING AN ARTICULATION MECHANISM HAVING ROTATION ABOUT THE LONGITUDINAL AXIS

Abstract of the Invention

A surgical instrument particularly suited to endoscopic articulates an end effector by including an end effector having a geared articulation mechanism that converts rotational motion from a handle portion. A hollow articulation drive tube transfers the rotation motion in some versions to a spear gear, bevel gear or snaggle tooth gear articulation mechanism. Alternatively, one or more threaded drive rod offset from a longitudinal axis engages a worm gear or flex-neck articulation mechanism.